

ABSTRACT OF THE DISCLOSURE

A method is provided for processing a substrate including treating a surface of a dielectric layer comprising silicon and carbon by exposing the dielectric layer comprising silicon and carbon to a plasma of an inert gas, and depositing a photoresist on the dielectric layer comprising silicon and carbon. The dielectric layer may comprise a first dielectric layer comprising silicon, carbon, and nitrogen, and a second layer of nitrogen-free silicon and carbon containing material in situ on the first dielectric layer, and a third dielectric layer comprising silicon, oxygen, and carbon on the second dielectric layer.